

**Snowmobiles Meeting Yellowstone and Grand Teton National Parks'
Best Available Technology (BAT) Requirements**

October 30, 2009

Snowmobile	Air Emissions (g/kW-hr)		Sound Emissions (dBA)
	Hydrocarbons	Carbon Monoxide	
Average 2-Stroke (Non-BAT)	150	400	78
BAT Requirements	15 ¹	120 ²	73 ³
2004 Arctic Cat T660 Touring ⁴	5.62 FEL: 10	92.30 FEL: 115	71.75
2004 Bombardier Ski-Doo Elite SE, equipped with the Elite BAT upgrade ^{4,5}	4.65	103.16	74.8
2004 Bombardier Ski-Doo Legend Sport GT V1000, equipped with BAT upgrade ^{4,5}	6.12	92.93	72.3
2004 Polaris Frontier Classic and Touring models ⁴	5.4 FEL: 10	111.6 FEL: 140	73.2-73.7
2005 Arctic Cat Bearcat W/T	5.62 FEL: 8	92.30 FEL: 105	73.7
2005 Arctic Cat T660 Touring	5.62 FEL: 8	92.30 FEL: 105	72.2
2005 Bombardier Ski-Doo Legend Sport GT V1000, equipped with BAT upgrade kit ⁵	4.65 FEL: 6.5	92.93 FEL: 120	71.8
2005 Polaris Frontier Touring	5.4 FEL: 10	111.6 FEL: 120	73.7
2006 Arctic Cat Bearcat 660 W/T	FEL: 8	FEL: 105	74.5
2006 Arctic Cat Panther 660 Touring and Trail models	FEL: 8	FEL: 105	73.9
2006 Arctic Cat 660 Touring	FEL: 8	FEL: 105	72.2
2006 Polaris FS Classic and FS IQ Touring	9.8 FEL: 15	98.4 FEL: 120	75
2006 Yamaha RS Venture Touring with Yellowstone BAT kit	FEL: 10	FEL: 120	71.9
2007 Arctic Cat Bearcat 660 W/T, Panther 660 Touring, Panther 660 Trail, 660 Touring	FEL: 8	FEL: 105	Same as 2006 models
2007 Bombardier Ski-Doo Legend V800 Trail, Legend V800 Touring, Expedition V800 Sport, Skandic V800 Tundra	FEL: 8	FEL: 120	72-73.9
2007 Polaris FS IQ Touring	FEL: 15	FEL: 120	75
2007 Yamaha RS Venture and RS Vector, equipped with Yellowstone BAT kit	FEL: 10	FEL: 120	71.9
2008 Arctic Cat 660 Touring, Bearcat 660 W/T and Panther 660 Touring	FEL: 8	FEL: 105	Same as 2006 models
2008 Bombardier Ski-Doo Legend Trail, Legend Touring, Expedition Sport V800, Tundra, Expedition TUV, Skandic SWT	FEL: 8	FEL: 120	70.1-71.9
2008 Yamaha RS Venture and RS Vector, equipped with Yellowstone BAT kit	FEL: 10	FEL: 120	71.9
2008 Polaris FS IQ Touring	FEL: 15	FEL: 120	75
2009 Arctic Cat TZ1, equipped with Yellowstone throttle stop	FEL: 9	FEL: 120	74
2009 Bombardier Skandic Tundra LT V800, Legend Touring V800, GTX LE 1200 and GTX SE 1200	FEL: 8-10	FEL: 119-120	70.1-72
2009 Polaris FS IQ Touring	FEL: 15	FEL: 120	75

2009 Yamaha RS10VT (Venture series) and RS10R (Vector series) snowmobiles, equipped with Yellowstone BAT kit	FEL: 11	FEL: 120	70
2010 Yamaha RS10VT (RS Venture), equipped with Yellowstone BAT kit	FEL: 11	FEL: 120	71.8 - 72.1
2010 Bombardier Ski-Doo GSX SE 1200, GTX LE 1200, and GTX SE 1200	FEL: 10	FEL: 119	72.6 - 75.1
2010 Arctic Cat Z1/Z1 LXR and TZ1/TZ1 LXR throttle-limited snowmobiles	FEL: 9	FEL: 120	71.6 - 74.4

¹ Hydrocarbons: certified by EPA to a Family Emissions Limit (FEL) of 15 g/kW-hr or less.

² Carbon Monoxide: certified by EPA to a Family Emissions Limit (FEL) of 120 g/kW-hr or less. Air emission figures for carbon monoxide and hydrocarbons presented are either the Official Test Results (OTR) or the certified FEL. The Official Test Results are actual measured emissions. The FEL's are not-to-exceed levels as certified by EPA.

³ Society of Automotive Engineers testing procedures allow for a 2 dB tolerance over the sound level limit to provide for variations in test site, temperature gradients, wind velocity gradients, test equipment, and inherent differences in nominally identical vehicles. (It has been observed that under some test site conditions, variability in test results greater than 2 dB can be experienced.) Sound emission figures represent an average of Official Test Results.

⁴ Yellowstone BAT certification for all 2004 year model snowmobiles will expire at the end of the 2009-2010 winter. Once approved, a snowmobile would generally be certified in Yellowstone as BAT for a period of six years. On Jackson Lake in Grand Teton, a snowmobile would be certified as BAT for six years or 6,000 miles, whichever is greater, not to exceed 10 years regardless of mileage (see below list for snowmobiles continue to be authorized for use on Jackson Lake).

⁵ The 2004 Bombardier Ski-Doo Elite SE and the 2004-2005 Legend Sport GT V1000 must be equipped with BAT upgrade kits in order to meet BAT requirements. The upgrade kits lowers emissions levels by controlling the maximum throttle body opening and uses different software for the snowmobile's electronic control unit.

2002-2003 Model Year BAT Snowmobiles Authorized to be used on Jackson Lake in Grand Teton National Park

Snowmobile	Air Emissions (g/kW-hr)		Sound Emissions (dBA)
	Hydrocarbons	Carbon Monoxide	
Average 2-Stroke (Non-BAT)	150	400	78
BAT Requirements	15	120	73
2002 Arctic Cat 4-Stroke Touring	6.20	79.95	71.3
2002 Arctic Cat 4-Stroke Trail	6.20	79.95	72.0
2002 Polaris Frontier Touring	3.19	79.15	74.6
2003 Arctic Cat 4-Stroke Touring and Trail models	7.55	95.40	70.1-72.2
2003 Bombardier Ski-Doo Legend Sport GT V1000, equipped with BAT upgrade	6.12	92.93	72.3
2003 Polaris Frontier Classic and Touring models	5.4	111.6	74.3

Notes:

The 2002 model year snowmobiles would be authorized through March 31, 2011

The 2003 model year snowmobiles would be authorized through March 31, 2012